

IOT BASED PUBLIC TRANSPORTATION AND OPTIMIZATION

DOCUMENTATION:

ProjectObjectives:

The objective of the project is to develop an IOTbased public transportation and optimization to improve the efficiency and effectiveness of public transportation system through strategies like, route planning , scheduling ,fare structures and technology integration to enhance the overall experience for passengers while minimizing cost and environment impact .

IOT DEVICE SETUP:

The IOT device used in this project include :

Hardware Requirements:

- 1.internet connection
- 2.1GB /2GB ram
- 3.8GB disk
- 4.above 1.2 Ghz processor
- 5.camera
6. IR sensor.

Software requirements:

- 1.os-Raspbian
- 2.Language-python

PLATFORM DEVELOPMENT:

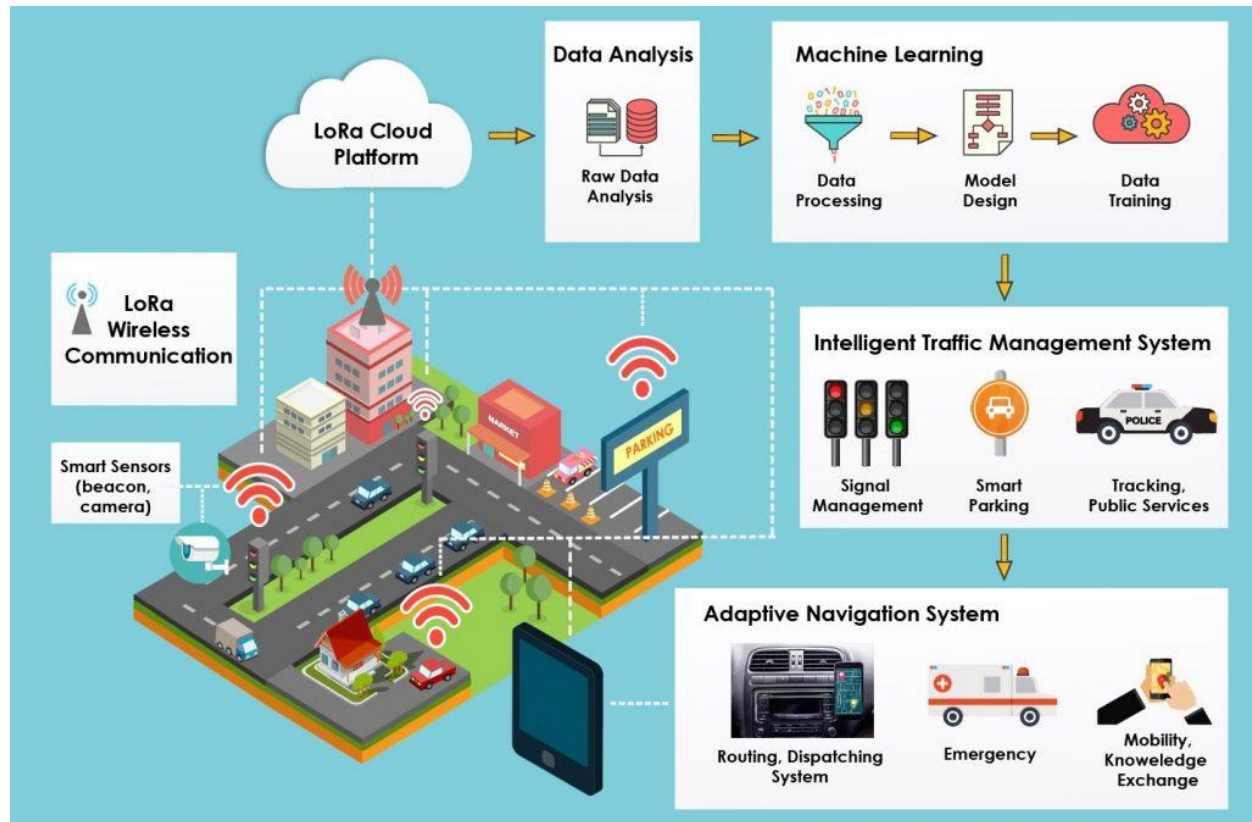
The data sharing platform used in this project is built using python.It involves on going monitoring adjustment to meet the evolving needs of the urban environment.

CODE IMPLEMENTATION :

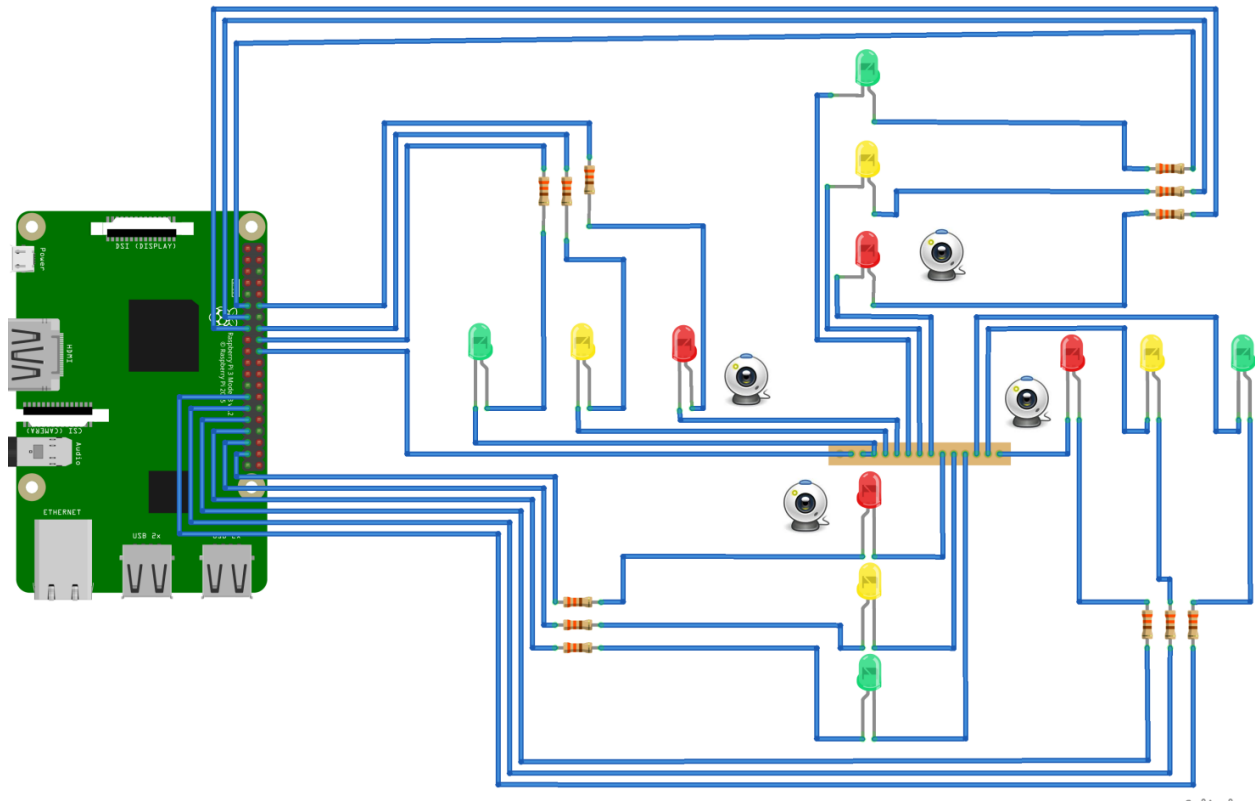
The code for this project is available on github link.Java script code is used for direction service.

DIAGRAMS ,SCHEMATIC AND SCREENSHOT :

The following diagrams ,schematics and screenshots are available for this project:



Schematic diagram of the raspbian:



SUBMISSION :

To replicate this project follow this instructions;

1. Set up the raspberry pi with IR sensors and cameras .
2. Upload javascript code to the board .
3. Setup the data sharing platform by installing HTML.
4. Create a new database in html.
5. Import the database scheme from .ml.
6. Update config.py with ur data base credentials.
7. Run app.py to start the data sharing platform.
8. Integrate the raspberry pi with the data sharing platform using python.